

LEAR PETROLEUM EXPLORATION, INC.

ROCKY MOUNTAIN DIVISION
ORCHARD PLACE IV, SUITE 110 / PHONE 303/740-8212
5990 S. SYRACUSE STREET / ENGLEWOOD, COLORADO 80111



December 6, 1983

RECEIVED
DEC 6 1983

Division of Oil, Gas & Mining
4241 State Office Building
Salt Lake City, Utah 84114

Attention: Mr. Norman Stout

**DIVISION OF
OIL, GAS & MINING**

RE: Lear Petroleum Exploration, Inc.
Proposed Well Jones #27-11
2,140' FSL, 2,140' FWL
Sec 27-T35S-R26E
San Juan County, Utah

Dear Mr. Stout:

Enclosed for your approval is an Application for Permit to Drill for the Jones #27-11 Well, along with a survey plat, \$50,000 blanket bond, 10-Point Program, and a copy of a topo map showing road entry into location. This well is an offset to our Jones #27-9 Well approved by you on October 28, 1983.

Drilling water will probably be obtained from Mr. M. C. Turner as before, and his water supply has already been approved by the State of Utah Division of Water Rights. However, as soon as that information is definite, I will give you a call and confirm the permit numbers. No needed water disposal is anticipated during drilling operations. In the event there is produced water, disposal will be arranged with operators in the vicinity at a State approved disposal or water injection well.

We are faced with a very short deadline for the spud date of this well. Any help you can give us in expediting approval for this application as soon as possible will be greatly appreciated. If you should have any questions, please give me a call at (303) 740-8212. Thank you for your help.

Very truly yours,

LEAR PETROLEUM EXPLORATION, INC.

Marcia McCracken

Marcia McCracken
Operations Technician

Encl.

*# Water
09-12-83
Good thru Jan 84
as per Lee Johnson
12-7-83*

**STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING**

SUBMIT IN TRIPPLICATE*
(Other instructions on reverse side)

5. Lease Designation and Serial No.

Fee ✓

6. If Indian, Allottee or Tribe Name

N/A

7. Unit Agreement Name

N/A

8. Farm or Lease Name

Jones

9. Well No.

#27-11

10. Field and Pool, or Wildcat

Wildcat

11. Sec., T., R., M., or Blk. and Survey or Area

Sec 27-35S-26E

12. County or Parrish 13. State

San Juan Utah

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work

DRILL

DEEPEN

PLUG BACK

b. Type of Well

Oil Well

Gas Well

Other

Single Zone

Multiple Zone

2. Name of Operator

LEAR PETROLEUM EXPLORATION, INC.

3. Address of Operator

5990 S. Syracuse St., Suite 110, Englewood, Colorado 80111

4. Location of Well (Report location clearly and in accordance with any State requirements.)*

At surface

2,140' FSL, 2,140' FWL (NE SW) Sec 27-35S-26E

At proposed prod. zone

Same

14. Distance in miles and direction from nearest town or post office*

Approximately 11 miles southwest of Dove Creek, Colorado

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. line, if any)

2,140'

16. No. of acres in lease

1111.86

17. No. of acres assigned to this well

40

18. Distance from proposed location* to nearest well, drilling, completed, or applied for, on this lease, ft.

2,840'

19. Proposed depth

6,450' (Desert Creek)

20. Rotary or cable tools

rotary

21. Elevations (Show whether DF, RT, GR, etc.)

22. Approx. date work will start*

Immediately upon State Approval

23.

PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
12-1/4"	9-5/8"	36# K-55	2,000'	760 sks
8-3/4"	5-1/2"	17# K-55	6,450'	265 sks

Lear plans to drill a 12-1/4" hole to 2,000' and set 9-5/8" 36# csg w/760 sks Class "H" cem to surface. Then drill ahead w/8-3/4" hole to TD 6,450' Desert Creek Fm, and set 5-1/2" 17# csg at TD w/265 sks Class "H" cem to 4,500'.

See attached 10-Point Program for further details.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

Signed

Tony Koenig & K.S.

Title Drlg & Production Engineer

Date December 5, 1983

(This space for Federal or State office use)

Permit No. Approval Date

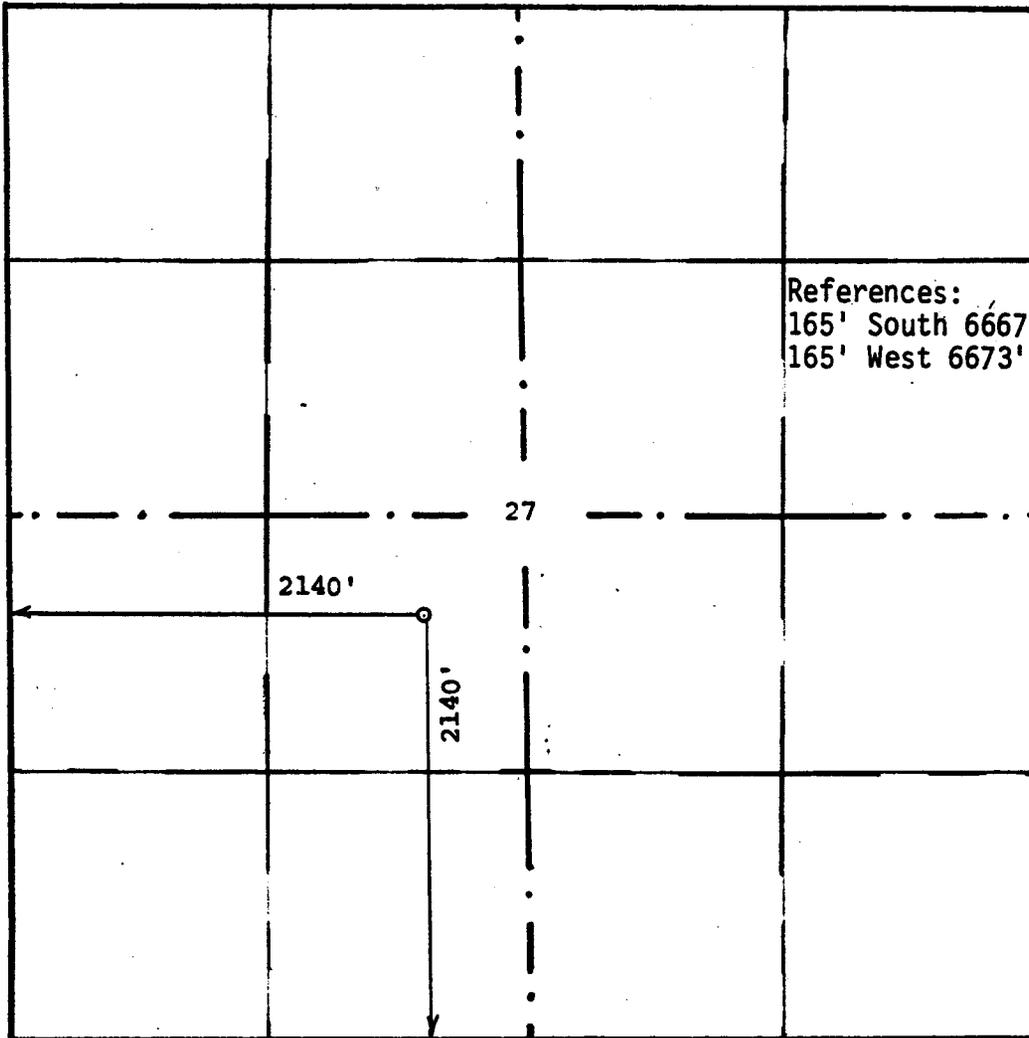
Approved by Title Date

Conditions of approval, if any:



POWERS ELEVATION

Well Location Plat



1"=1000'

Operator Lear Petroleum		Well name Jones 27-11	
Section 27	Township 35 South	Range 26 East	Meridian SLM
Footages 2140'FSL & 2140'FWL			County/State San Juan, Utah
Elevation 6668'	Requested by Kim Smith		
The above plat is true and correct to the best of my knowledge and belief.			
3 Dec. '83		<u>Gerald G. Huddleston</u> Gerald G. Huddleston, L.S.	

Jones #27-11
NE SW Sec 27-T35S-R26E
San Juan County, Utah

1. Surface Formation - Dakota Ss

2 & 3 Estimated Formation Tops:

Morrison Ss	325'
Entrada Ss	1,100'
Navajo Ss	1,285'
Kayenta Ss	1,585'
Wingate Ss	1,740'
Chinle Ss/Sh	1,975'
Shinarump Ss	2,650'
Cutler Ss/Sh	2,760'
Honaker Trial Carb/Ss	4,685'
Paradox Carb	5,335'
Ismay Carb	5,985'
Desert Creek Carb	6,225'
Akah Carb	6,335'
Salt	6,360'
TD	6,450'

4. Casing Program

12-1/4"	9-5/8"	36#	K-55 STC (new)	0'-2,000'	Cem to surface
8-3/4"	5-1/2"	17#	K-55 STC (new)	4,500'-TD	Cem w/265 sks

5. Pressure Control Equipment

BOP's and choke manifold will be installed and pressure tested before drilling out under surface casing and then will be checked daily as to mechanical operating conditions. Ram type preventors and related pressure control equipment will be pressure tested to rated working pressure of the stack assembly or to 70% of the minimum internal yield pressure of the casing. BOP's will be pressure tested at least once every thirty days.

6. Mud Program

- 0'-2,500' Spud w/wtr; Mix gel & lime as necessary to insure proper hole cleaning and casing operations. LCM will be on location in the event of lost circulation.
- 2,500'-4,500' Treated wtr, fresh wtr w/gel & lime sweeps controlling solids to 5-7% weight, not to exceed 8.4-8.7#/gal, vis 32-45 sec.
- 4,500'-TD Mud up w/gel and some lig, wt 9.3-12.0#/gal, vis 32-45 sec, WL 12 cc or less. Additions of Driscose to control filtration rate, also caustic soda to maintain pH level.

Sufficient mud materials to maintain mud properties, control lost circulation and to contain a blowout will be available at the wellsite.

7. Auxilliary Equipment

- a) Kelly cock
- b) Drill pipe float (except for lost circulation drilling conditions)
- c) Monitoring of mud system will be visual unless otherwise specified
- d) A sub on the floor with a full opening valve to be stabbed into drill pipe when a Kelly is not in the string.

8. Logging

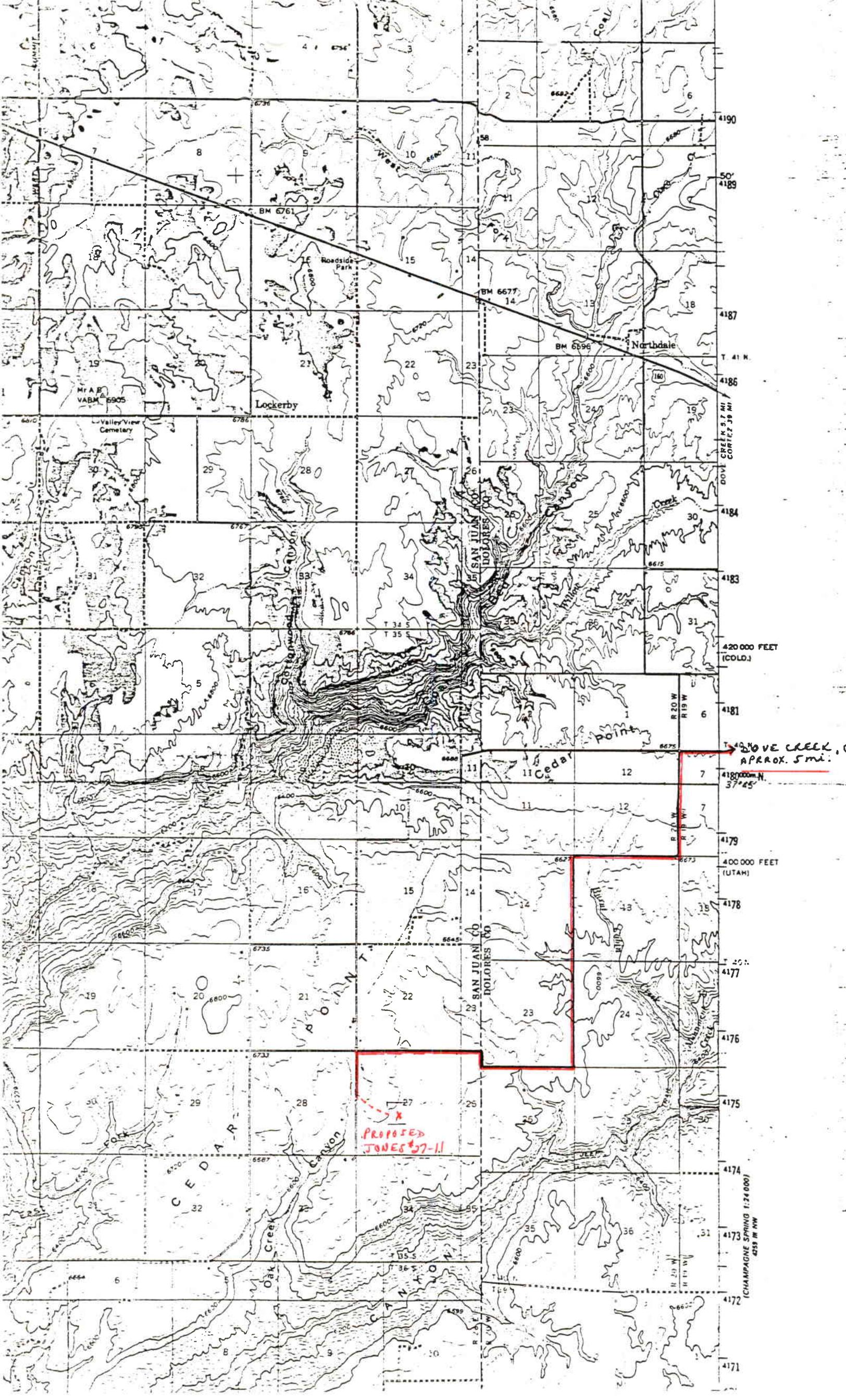
DIL-SFL/GR-SP	Base surf csg - TD
CNL-FDC/GR	Base surf csg - TD
Sonic/GR	Base surf csg - TD
Dipmeter	5,375'-TD ✓
Mud Logging	4,000'-TD

Coring - none anticipated

Testing - DST zones of interest - possibly Ismay and Desert Creek

Completion - no stimulation is anticipated

9. We anticipate slight over pressuring in Desert Creek, but normal temperatures. This is based on previous geological data from nearby wells. Estimated BHP in the Desert Creek is 3720 psi.
10. Anticipated starting date - Immediately upon State approval.
- Durations of operations - approximately 3 weeks.



BM 6761

BM 6677

BM 6696

Mt A B VABM 6905

Lockerby

Northdale

SAN JUAN CO. DOLORES CO.

Cedar Point

DOVE CREEK, CO. APPROX. 5 mi.

PROPOSED JONES 07-11

(CHAMPAGNE SPRING 1:24,000) 425' IN NW

OPERATOR LEAP PETROLEUM EXPLORATION INC DATE 12-7-83

WELL NAME JONES 27-11

SEC NE SW 27 T 35 S R 26 E COUNTY SAN JUAN

43-037-30966
API NUMBER

FEE
TYPE OF LEASE

POSTING CHECK OFF:

INDEX

MAP

HL

NID

PI

PROCESSING COMMENTS:

WATER OK - NO OIL OR GAS WELLS WITHIN 4960'

**APPROVED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING**

DATE: 12-7-83

BY: [Signature]

CHIEF PETROLEUM ENGINEER REVIEW:

[Signature]
12/7/83

APPROVAL LETTER:

SPACING: A-3 _____ UNIT

c-3-a _____ CAUSE NO. & DATE

c-3-b

c-3-c

SPECIAL LANGUAGE:

RECONCILE WELL NAME AND LOCATION ON APD AGAINST SAME DATA ON PLAT MAP.

AUTHENTICATE LEASE AND OPERATOR INFORMATION

VERIFY ADEQUATE AND PROPER BONDING *BLANK*

AUTHENTICATE IF SITE IS IN A NAMED FIELD, ETC.

APPLY SPACING CONSIDERATION

ORDER ND

UNIT ND

c-3-b

c-3-c

BY: _____

DATE: _____

OIL, GAS, AND MINING
OF UTAH DIVISION OF
APPROVED BY THE STATE

CHECK DISTANCE TO NEAREST WELL.

CHECK OUTSTANDING OR OVERDUE REPORTS FOR OPERATOR'S OTHER WELLS.

IF POTASH DESIGNATED AREA, SPECIAL LANGUAGE ON APPROVAL LETTER

IF IN OIL SHALE DESIGNATED AREA, SPECIAL APPROVAL LANGUAGE.

VERIFY LEGAL AND SUFFICIENT DRILLING WATER

December 7, 1983

Lear Petroleum Exploration, Inc.
5990 S. Syracuse St., Suite 110
Englewood, Colorado 80111

RE: Well No. Jones 27-11
NESE Sec. 27, T. 35S, R. 26E
2140' FSL, 2140' FWL
San Juan County, Utah

Gentlemen:

Insofar as this office is concerned, approval to drill the above referred to oil/gas well is hereby granted in accordance with Rule C-3(b), General Rules and Regulations and Rules of Practice and Procedure.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

RONALD J. FIRTH - Chief Petroleum Engineer
Office: 533-5771
Home: 571-6068

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling. Your cooperation in completing this form will be appreciated.

Further, it is requested that this Division be notified within 24 hours after drilling operations commence, and that the drilling contractor and rig number be identified.

The API number assigned to this well is 43-037-30966.

Sincerely,



Norman C. Stout
Administrative Assistant

NCS/as
Enclosure

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. <input checked="" type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER		5. LEASE DESIGNATION AND SERIAL NO. Fee
2. NAME OF OPERATOR LEAR PETROLEUM EXPLORATION, INC.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A
3. ADDRESS OF OPERATOR 5990 S. Syracuse St., Suite 110, Englewood, Colorado 80111		7. UNIT AGREEMENT NAME N/A
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 2,140' FSL, 2,140' FWL (NE SW) Sec 27-35S-26E		8. FARM OR LEASE NAME Jones
14. PERMIT NO. 43-037-30966		9. WELL NO. #27-11
15. ELEVATIONS (Show whether DF, RT, GR, etc.) G.L. 6,668'		10. FIELD AND POOL, OR WILDCAT Sec 27-35S-26E
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA San Juan Utah
		12. COUNTY OR PARISH San Juan
		13. STATE Utah

TIGHT HOLE

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <u>Up-date Summary</u> <input checked="" type="checkbox"/>	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Spudded well w/dry hole digger 8:00 am 12/12/83. Drld rathole and mousehole. Resumed drlg w/rotary rig @ 2:00 pm 12/14/83. Rn 134' of 13-3/8" 48# ST&C csg, cem w/150 sks Class "B" 2% 1/4#/sk Celoflake. Drld ahead w/12-1/4" hole to 2,072'. Rn 47 jts 9-5/8" 36# K-55 csg, set @ 2,067'. Cem w/540 sks Lite cem w/6% gel and 3#/sk Hi Seal and 2% CaCl₂ - tailed in w/220 sks Class "H" w/2% CaCl₂. Currently drlg ahead w/8-3/4" hole. TD as of this date 5,792'.

TIGHT HOLE

RECEIVED
JAN 9 8 1983

DIVISION OF
OIL, GAS & MINING

18. I hereby certify that the foregoing is true and correct

SIGNED Tony Koentig TITLE Drlg & Production Engineer DATE December 28, 1983

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:



FROM THE DESK OF

Marcia McCracken

Please keep all information
pertaining to the Jones # 27-11 well
CONFIDENTIAL for as long as
possible

Thank you.
Marcia McCracken



DIVISION OF
OIL, GAS & MINING

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
4241 State Office Building
Salt Lake City, UT 84114

RECEIVED
JAN 18 1987

DIVISION OF
OIL, GAS & MINING

REPORT OF WATER ENCOUNTERED DURING DRILLING

Well Name & Number Jones #27-11
Operator Lear Petroleum Exploration, Inc. Address 5990 S. Syracuse St., Suite T10 Englewood, Colorado 80111
Contractor Coleman Drilling Address Farmington, New Mexico
Location NE 1/4 SW 1/4 Sec. 27 T. 35S R. 26E County San Juan

Water Sands

	<u>Depth</u>		<u>Volume</u>	<u>Quality</u>
	From	To	Flow Rate or Head	Fresh or Salty
1.	1,098'	1,284' (Entrada)	No flow to surface	Not tested
2.	1,284'	1,597' (Navajo)	No flow to surface	Not tested
3.	1,597'	1,732' (Kayenta)	No flow to surface	Not tested
4.	1,732'	1,935' (Wingate)	No flow to surface	Not tested
5.	_____			

(Continue on reverse side if necessary)

Formation Tops

Remarks

- NOTE: (a) Report on this form as provided for in Rule C-20, General Rules and Regulations and Rules of Practice and Procedure.
- (b) If a water analysis has been made of the above reported zone, please forward a copy along with this form.

LYNES

TECHNICAL SERVICES, Security Life Bldg. • Suite 1350 • 1616 Glenarm • Denver, Colorado 80202 • Phone: (303) 573-8027

Contractor <u>Coleman Drilling Co</u>	Top Choke <u>1" X 6"</u>	Flow No. 1 <u>30</u> Min.
Rig No. <u>4</u>	Bottom Choke <u>1"</u>	Shut-in No. 1 <u>60</u> Min.
Spot <u>NW SE</u>	Size Hole <u>8 3/4"</u>	Flow No. 2 <u>90</u> Min.
Sec. <u>27</u>	Size Rat Hole <u>--</u>	Shut-in No. 2 <u>180</u> Min.
Twp. <u>35 N</u>	Size & Wt. D. P. <u>4 1/2" XH</u>	Flow No. 3 <u>--</u> Min.
Rng. <u>26 E</u>	Size Wt. Pipe <u>6 1/2"</u>	Shut-in No. 3 <u>--</u> Min.
Field <u>Wildcat</u>	I. D. of D. C. <u>2 1/2"</u>	Bottom Hole Temp. <u>133⁰F</u>
County <u>San Juan</u>	Length of D. C. <u>618 ft</u>	Mud Weight <u>9.5</u>
State <u>Utah</u>	Total Depth <u>6460 ft</u>	Gravity <u>--</u>
Elevation <u>--</u>	Interval Tested <u>6418-6460 ft</u>	Viscosity <u>--</u>
Formation <u>Desert Creek</u>	Type of Test <u>Bottom Hole Conventional</u>	

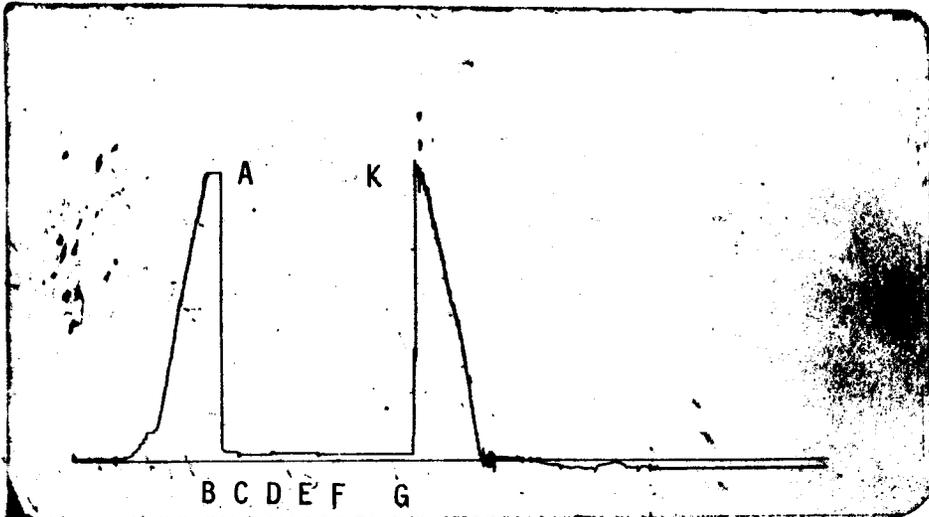
Tool opened @ 7:25 a.m.

Inside Recorder

PRD Make Kuster K-3
 No. 18731 Cap. 5125 ● 6402'

	Press	Corrected
Initial Hydrostatic	A	3189
Final Hydrostatic	K	3201
Initial Flow	B	109
Final Initial Flow	C	52
Initial Shut-in	D	70
Second Initial Flow	E	70
Second Final Flow	F	50
Second Shut-in	G	59
Third Initial Flow	H	--
Third Final Flow	I	--
Third Shut-in	J	--

Lynes Dist.: Rock Springs
 Our Tester: Steve McKinney
 Witnessed By: Tony Koenig



Did Well Flow - Gas No Oil No Water No

RECOVERY IN PIPE:

36 ft Fluid = 0.18 bbl.
 36 ft Drilling fluid = 0.18 bbl.

Blow Description

1st flow: Tool opened with a weak blow, increased to 2 inches in 5 minutes, increased to 4 inches in 25 minutes and remained throughout the flow.

2nd flow: Tool opened with a weak blow, increased to 2 inches in 5 minutes, decreased to 1 1/2 inches in 6 minutes, decreased to 1 inch in 45 minutes and remained throughout the flow.

Comments: The test results indicate a mechanically successful test. The flow and shut-in curves suggest virtually no permeability within the zone tested.

Operator **Leas Petroleum**
 Address **5990 South Syracuse Street, Suite 110**
Englewood, Colorado 80111
 Well Name and No. **Jones #27-11**
 Ticket No. **00740**
 Date **1-2-84**
 No. Final Copies **26**
 DST No. **1**

OST#: 1
JONES #27-11
6418-6460

Location: 27-35N-26E
Test Type: BOTTOM HOLE CONVENTIONAL
Formation: DESERT CREEK

Recorder Number: 18731
Recorder Depth: 6402 ft.

SAMPLE DATA

SAMPLE CHAMBER:

Capacity of sample chamber 2000 cc
Volume of sample..... 2000 cc
Pressure in sampler..... 40 psig
Where sampler was drained... on location

Sampler contained:
Mud 2000 cc drilling mud

RESISTIVITY DATA:

Top.....: 10 000 PPM CL
Middle.....: 10 000 PPM CL
Bottom.....: 10 000 PPM CL
Sampler.....: 9000 PPM CL
Mud pit.....: 12 000 PPM CL
Make-up Water...: 1100 PPM CL

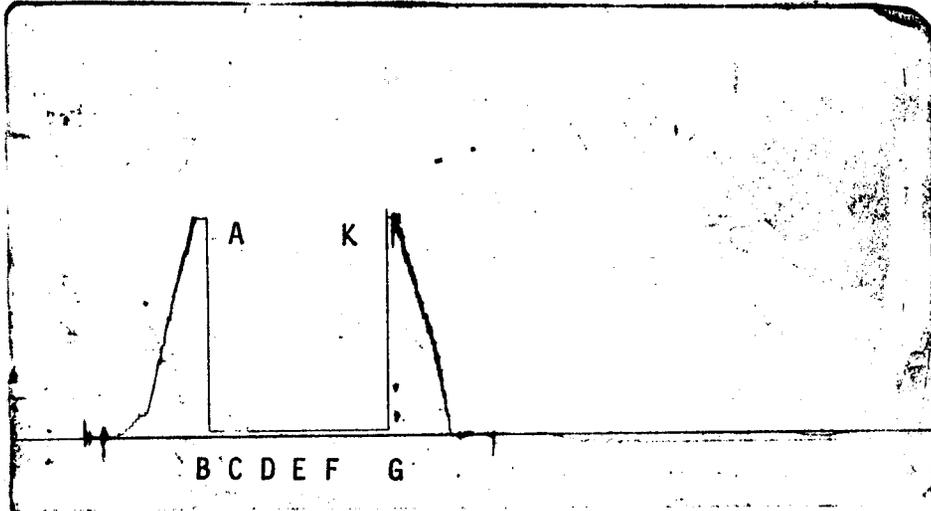
AR PETROLEUM
DST#: 1
JONES #27-11
6418-6460

PRESSURE RECORDER NUMBER : 24521

DEPTH : 6460.00ft. LOCATION : OUTSIDE
TYPE : K-3 CAPACITY : 6625.00PSI

PRESSURE
PSI

A)Initial Hydro : 3193.0
B)1st Flow Start: 77.0
C)1st Flow End : 66.0
D)END 1st Shutin: 80.0
E)2nd Flow Start: 74.0
F)2nd Flow End : 58.0
G)END 2nd Shutin: 77.0
K)Final Hydro. : 3199.0



TEST TIMES(MIN)
1st FLOW : 30
SHUTIN: 60
2nd FLOW : 90
SHUTIN:180

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER P & A		5. LEASE DESIGNATION AND SERIAL NO. Fee
2. NAME OF OPERATOR Lear Petroleum Exploration, Inc.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A
3. ADDRESS OF OPERATOR 5990 S. Syracuse St., Suite 110, Englewood, Colorado 80111		7. UNIT AGREEMENT NAME N/A
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 2,140' FSL, 2,140' FWL (NE SW) Sec 27-35S-26E		8. FARM OR LEASE NAME Jones
14. PERMIT NO. 43-037-30966	15. ELEVATIONS (Show whether DF, ST, OR, etc.) G.L. 6,668'	9. WELL NO. #27-11
		10. FIELD AND POOL, OR WILDCAT Unnamed
		11. SEC., T., R., M., OR B.L. AND SURVEY OR ABMA Sec 27-35S-26E
		12. COUNTY OR PARISH San Juan
		13. STATE Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input checked="" type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	
(Other) <input type="checkbox"/>		(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)
(See Sundry Notice dated December 28, 1983)

Lear drilled an 8-3/4" hole to a TD of 6,510'. Logged well and ran DST #1 from 6,418'-6,460' Desert Creek Formation.

Per verbal permission from Ron Firth 1/4/84, P & A well as follows:

Depth	Cement
6,300'-6,150'	65 sks
4,700'-4,800'	60 sks
2,100'	50 sks (1/2 in, 1/2 out)
surface	20 sks

Rel rig 7:00 pm 1/5/84.

Lear plans to rehabilitate this location and access road in the Spring-Summer of 1984.

RECEIVED
JAN 20 1984

DIVISION OF OIL GAS & MINING

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING

DATE: _____
BY: _____

18. I hereby certify that the foregoing is true and correct
SIGNED Tony Koenig TITLE Drig & Production Engineer DATE January 17, 1984

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

SUBMIT IN DUPLICATE*

(See other instructions on reverse side)

STATE OF UTAH
OIL & GAS CONSERVATION COMMISSION

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL GAS WELL DRY Other P & A

b. TYPE OF COMPLETION: NEW WELL WORK OVER DEEP-EN PLUG BACK DIFF. RESVR. Other _____

2. NAME OF OPERATOR
Lear Petroleum Exploration, Inc.

3. ADDRESS OF OPERATOR
5990 S. Syracuse St., Suite 110, Englewood, Colorado 80111

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface 2,140' FSL, 2,140' FWL (NE SW) Sec 27-35S-26E
At top prod. interval reported below _____
At total depth _____

14. PERMIT NO. 43-037-30966 DATE ISSUED 12/8/83

5. LEASE DESIGNATION AND SERIAL NO.
Fee

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
N/A

7. UNIT AGREEMENT NAME
N/A

8. FARM OR LEASE NAME
Jones

9. WELL NO.
#27-11

10. FIELD AND POOL, OR WILDCAT OR AREA
Unnamed Wildcat

11. SEC., T., R., M. OR BLOCK AND SURVEY OR AREA
Sec 27-35S-26E

12. COUNTY OR PARISH
San Juan

13. STATE
Utah

15. DATE SPUNDED 12/12/83 16. DATE T.D. REACHED 1/2/84 17. DATE COMPL. (Ready to prod.) P & A 18. ELEVATIONS (DF, RBK, RT, GR, ETC.)* GL 6,668' 19. ELEV. CASINGHEAD --

20. TOTAL DEPTH, MD & TVD 6,510' 21. PLUG, BACK T.D., MD & TVD -- 22. IF MULTIPLE COMPL., HOW MANY* -- 23. INTERVALS DRILLED BY → ROTARY TOOLS 0'-6,510' CABLE TOOLS --

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
N/A 25. WAS DIRECTIONAL SURVEY MADE _____

26. TYPE ELECTRIC AND OTHER LOGS RUN
DIL-GR; BHC Sonic; FED; CDL/CNL 27. WAS WELL CORED yes

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9-5/8"	36#	2,067'	12-1/4"	760 sks	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
N/A				

30. TUBING RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

31. PERFORATION RECORD (Interval, size and number)
None

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.
DEPTH INTERVAL (MD) _____ AMOUNT AND KIND OF MATERIAL USED _____

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)					
<u>P & A</u>		<u>P & A</u>					
DATE OF TEST	HOURS TESTED	CHOKER SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
			→				
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
		→					

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) _____ TEST WITNESSED BY _____

35. LIST OF ATTACHMENTS _____

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Jerry Koenig TITLE Drilling & Production Engineer DATE January 16, 1984

(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. **Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES		38. GEOLOGIC MARKERS																						
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.																					
Desert Creek	6,418	6,460'	<p>DST #1 IF 30 min ISI 60 min FF 90 min FSI 180 min DP Rec - 36' mud, no gas IFP 77#-79# ISIP 81# FFP 75#-84# FSIP 107# IH 3221# FH 3207# BHT 133° F.</p>																					
			<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">NAME</th> <th style="width: 20%;">MEAS. DEPTH</th> <th style="width: 40%;">TOP</th> </tr> </thead> <tbody> <tr> <td>Honaker Trail</td> <td style="text-align: center;">4,760'</td> <td></td> </tr> <tr> <td>Paradox</td> <td style="text-align: center;">5,370'</td> <td></td> </tr> <tr> <td>Upper Ismay</td> <td style="text-align: center;">6,110'</td> <td></td> </tr> <tr> <td>Lower Ismay</td> <td style="text-align: center;">6,259'</td> <td></td> </tr> <tr> <td>Desert Creek</td> <td style="text-align: center;">6,368'</td> <td></td> </tr> <tr> <td>Akah</td> <td style="text-align: center;">6,476'</td> <td></td> </tr> </tbody> </table>	NAME	MEAS. DEPTH	TOP	Honaker Trail	4,760'		Paradox	5,370'		Upper Ismay	6,110'		Lower Ismay	6,259'		Desert Creek	6,368'		Akah	6,476'	
NAME	MEAS. DEPTH	TOP																						
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STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUBMIT DUPLICATE*
(Other instructions on reverse side)

SUNDRY NOTICES AND REPORTS RECEIVED

(Do not use this form for proposals to drill or to deepen or plug back to an existing reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL GAS WELL OTHER P & A **OCT 01 1984**

2. NAME OF OPERATOR **LEAR PETROLEUM EXPLORATION, INC.**

3. ADDRESS OF OPERATOR **City Center IV
1801 California St., Suite 4800, Denver, Colorado 80202**

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
2,140' FSL, 2,140' FWL (NE SW) Sec 27-35S-26E

5. LEASE DESIGNATION AND SERIAL NO.
Fee

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
N/A

7. UNIT AGREEMENT NAME
N/A

8. FARM OR LEASE NAME
Jones

9. WELL NO.
#27-11

10. FIELD AND POOL, OR WILDCAT

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec 27-35S-26E

12. COUNTY OR PARISH
San Juan

13. STATE
Utah

14. PERMIT NO.
43-037-30966

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
G.L. 6,668'

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) Restoration of location <input checked="" type="checkbox"/>	
(Other) <input type="checkbox"/>			

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

(See Sundry Notice dated 1/17/84).

The pits have been backfilled; this location has been restored to its original condition and can be planted or plowed when the landowner wishes to do so.

18. I hereby certify that the foregoing is true and correct

SIGNED Marcia M. Cracken TITLE Operations Technician DATE September 28, 1984
Marcia McCracken

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
 CONDITIONS OF APPROVAL, IF ANY:



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dianne R. Nielson, Ph.D., Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

December 6, 1984

Lear Petroleum Exploration, Incorporated
5990 S Syracuse Street Suite 110
Englewood, Colorado 80111

Gentlemen:

Re: Well No. Jones 27-11 - Sec. 27, T. 35S., R. 26E.
San Juan County, Utah - API #43-037-30966

According to our records, a "Well Completion Report" filed with this office January 16, 1984, on the above referred to well, indicates the following electric logs were run: DIL-GR; BHC Sonic; CDL/CNL and FED.

Rule C-5 of The Oil and Gas Conservation General Rules and Regulations and Rules and Practice and Procedure states:

Within ninety (90) days after the suspension of operations on, abandonment of, or the completion of any well drilled for the production of oil and/or gas, and within ninety (90) days after the completion of any further operations on the well, if such operations involved drilling deeper or drilling or re-drilling any formation, a well log shall be filed with the Commission on a form prescribed by the Commission, (presently the OGC-3) together with a copy of the electric and radioactivity logs, if run.

We will be happy to acknowledge receipt of response to this notice if you will include an extra copy of the transmittal letter with a place for our signature and a self addressed envelope for the return. Such acknowledgement should avoid unnecessary mailing of a second notice from our agency.

Page 2
Lear Petroleum
Well No. Jones 27-11
December 6, 1984

Your prompt attention to the above matter will be greatly appreciated.

Sincerely,

A handwritten signature in cursive script that reads "Claudia Jones".

Claudia Jones
Well Records Specialist

cc: Dianne R. Nielson
Ronald J. Firth
John R. Baza

0017S/4-5



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

January 20, 1986

Lear Petroleum Exploration, Inc.
5990 South Syracuse Street, Suite 110
Englewood, Colorado 80111

Gentlemen:

Re: Jones #27-11 Well - Sec. 27, T. 35S, R. 26E
San Juan County, Utah - API 43-037-30966

A review of our records indicates that copies of the Desert Creek DST and Core Analysis, which were run on the referenced well, were not submitted with the January 16, 1984 completion report as required by Rule 312 of the Oil and Gas Conservation General Rules.

Please provide copies of the required Core and DST information at your earliest convenience, but not later than March 7, 1986.

Respectfully,

A handwritten signature in black ink, appearing to read 'Norman'.

Norman C. Stout
Administrative Assistant

ta

cc: Dianne R. Nielson
Ronald J. Firth
John R. Baza
File

0356/9



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

April 14, 1986

Lear Petroleum Exploration, Inc.
4925 Greenville Ave., Suite 950
Dallas, Texas 75206

Gentlemen:

Re: Jones #27-11 Well - Sec. 27, T. 35S, R. 26E
San Juan County, Utah - API 43-037-30966

A review of our records indicates that copies of the Desert Creek DST and Core Analysis, which were run on the referenced well, were not submitted with the January 16, 1984 completion report as required by Rule 312 of the Oil and Gas Conservation General Rules.

Please provide copies of the required Core and DST information at your earliest convenience, but not later than April 31, 1986.

Respectfully,

A handwritten signature in black ink, appearing to read "Norman C. Stout".

Norman C. Stout
Records Manager

ta

cc: Dianne R. Nielson
Ronald J. Firth
John R. Baza
File

0356/9

LEAR PETROLEUM EXPLORATION, INC.

950 ONE ENERGY SQUARE / PHONE 214/363-6085
4925 GREENVILLE AVENUE / DALLAS, TEXAS 75206



RECEIVED
APR 22 1986

April 18, 1986

DIVISION OF
OIL, GAS & MINING

Norman C. Stout
Records Manager
State of Utah National Resources
355 W. North Temple
3 Triad Center, Suite 350
Salt Lake City, UT 84180-1203

Re: Jones #27-11
Sun Juan Co., Utah

Dear Sir:

Enclosed are copies of the DST and core analysis report on the subject well as requested in your letter of April 14, 1986.

Sincerely,

Mel Hardy

Mel Hardy
Sr. Reservoir Engineer

MH:t1e
M2.MH

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

CORE ANALYSIS REPORT

FOR

LEAR PETROLEUM EXPLORATION

**JONES 27-11 WELL
BURNT CABIN FIELD
SAN JUAN COUNTY, UTAH**

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations, as to the productivity, proper operations, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
 DALLAS, TEXAS

LEAR PETROLEUM EXPLORATION
 JONES 27-11 WELL
 BURNT CABIN FIELD
 SAN JUAN COUNTY, UTAH

DATE ON : 01-JAN-84 OFF: 22-FEB-84
 FORMATION : DESERT CREEK
 DRLG. FLUID: WBM
 LOCATION : NE SW SEC. 27-T35N-R26E

FILE NO : 3803-3316
 LABORATORY: FARMINGTON
 ANALYSTS : GG:DS
 ELEVATION : 6682 KB

FULL DIAMETER ANALYSIS--BOYLE'S LAW POROSITY

SAMPLE NUMBER	DEPTH FEET	PERM MD MAX K _a	PERM MD 90DEG K _a	He POR	OILZ WTRZ PORE PORE	GRAIN DEN	DESCRIPTION
	6400.0-20.0						SHALE LIMESTONE-NO ANALYSI
	6420.0-26.0						ANHYDRITE-NO ANALYSIS
	6426.0-28.0						SHALE-NO ANALYSIS
1	6428.0-29.0	0.02	**	1.5	7.5 45.1	2.86	DOL GRY/BRN VFXLN SL/ANHY
2	6429.0-30.0	*48.	*14.	4.4	5.2 31.2	2.84	DOL GRY/BRN VFXLN SL/VUG
3	6430.0-31.0	0.70	0.51	2.3	0.0 35.2	2.85	DOL GRY/BRN VFXLN SL/VUG
4	6431.0-32.0	0.84	0.66	4.0	3.4 13.6	2.94	DOL GRY/BRN VFXLN ANHY SL/VUG
5	6432.0-33.0	0.34	0.27	2.7	7.6 30.5	2.85	DOL GRY/BRN VFXLN SL/VUG
6	6433.0-34.0	0.80	0.33	3.2	4.5 27.2	2.83	DOL GRY/BRN VFXLN SL/VUG
7	6434.0-35.0	0.44	0.23	3.7	7.1 28.5	2.84	DOL GRY/BRN VFXLN SL/VUG
8	6435.0-36.0	1.4	0.49	3.0	5.2 31.0	2.84	DOL GRY/BRN VFXLN SL/VUG
9	6436.0-37.0	0.33	0.31	3.3	6.0 36.2	2.84	DOL GRY/BRN VFXLN SL/VUG
10	6437.0-38.0	10.	4.7	2.7	4.3 17.2	2.83	DOL GRY/BRN VFXLN SL/VUG
11	6438.0-39.0	2.9	1.1	2.7	6.0 24.0	2.81	DOL GRY/BRN VFXLN SL/VUG
12	6439.0-40.0	4.0	3.8	3.7	6.7 19.2	2.81	DOL GRY/BRN VFXLN SL/VUG
13	6440.0-41.0	0.10	0.08	2.4	7.1 28.6	2.85	DOL GRY/BRN VFXLN SL/VUG
14	6441.0-42.0	<0.01	**	0.7	0.0 55.1	2.92	DOL GRY/BRN VFXLN SL/ANHY SL/PYR
	6442.0-58.0						SHALE DOLOMITE-NO ANALYSIS
	6458.0-60.0						CORE LOSS

* INDICATES FRACTURED PERMEABILITY PLUG
 ** INDICATES UNSUITABLE FOR FULL DIAMETER ANALYSIS

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

LEAR PETROLEUM EXPLORATION
JONES 27-11 WELL

DATE : 01-JAN-84
FORMATION : DESERT CREEK

FILE NO. : 3803-3316
ANALYSTS : GG:DS

*** CORE SUMMARY AVERAGES FOR 1 ZONE ***

DEPTH INTERVAL: 6428.0 TO 6442.0

FEET OF CORE ANALYZED : 14.0 FEET OF CORE INCLUDED IN AVERAGES: 14.0

-- SAMPLES FALLING WITHIN THE FOLLOWING RANGES WERE AVERAGED --

PERMEABILITY HORIZONTAL RANGE (MD.) : 0.00 TO 50. (UNCORRECTED FOR SLIPPAGE)
HELIUM POROSITY RANGE (%) : 0.0 TO 100.0
OIL SATURATION RANGE (%) : 0.0 TO 10.0
WATER SATURATION RANGE (%) : 10.0 TO 60.0

SHALE SAMPLES EXCLUDED FROM AVERAGES.

AVERAGES FOR DEPTH INTERVAL: 6428.0 TO 6442.0

AVERAGE PERMEABILITY (MILLIDARCIES)

ARITHMETIC PERMEABILITY : 5.0
GEOMETRIC PERMEABILITY : 0.66
HARMONIC PERMEABILITY : 0.08

PRODUCTIVE CAPACITY (MILLIDARCY-FEET)

ARITHMETIC CAPACITY : 70.
GEOMETRIC CAPACITY : 9.3
HARMONIC CAPACITY : 1.1

AVERAGE POROSITY (PERCENT) : 2.9

AVERAGE TOTAL WATER SATURATION : 27.7
(PERCENT OF PORE SPACE)

AVERAGE RESIDUAL OILSATURATION : 5.3
(PERCENT OF PORE SPACE)

PERMEABILITY VS POROSITY

COMPANY: LEAR PETROLEUM EXPLORATION
 FIELD : BURNT CABIN FIELD

WELL : JONES 27-11 WELL
 COUNTY, STATE: SAN JUAN COUNTY, UTAH

AIR PERMEABILITY : MD - HORIZONTAL (UNCORRECTED FOR SLIPPAGE)
 POROSITY : PERCENT (HELIUM)

DEPTH INTERVAL	RANGE & SYMBOL	PERMEABILITY		POROSITY		POROSITY AVERAGE	PERMEABILITY AVERAGES		
		MINIMUM	MAXIMUM	MIN.	MAX.		ARITHMETIC	HARMONIC	GEOMETRIC
6428.0 - 6442.0	1 (+)	0.000	50.0	0.0	5.0	2.9	5.0	0.08	0.66

EQUATION OF REDUCED LINE RELATING PERMEABILITY(K) TO POROSITY :
 $\log(K) = (\text{SLOPE})(\text{POROSITY}) + \text{LOG OF INTERCEPT}$
 $K = \text{ANTILOG}((\text{SLOPE})(\text{POROSITY}) + \text{LOG OF INTERCEPT})$

RANGE	EQUATION OF THE LINE
1	PERM = ANTILOG((1.0059)(POROSITY) + -3.0732)

100.

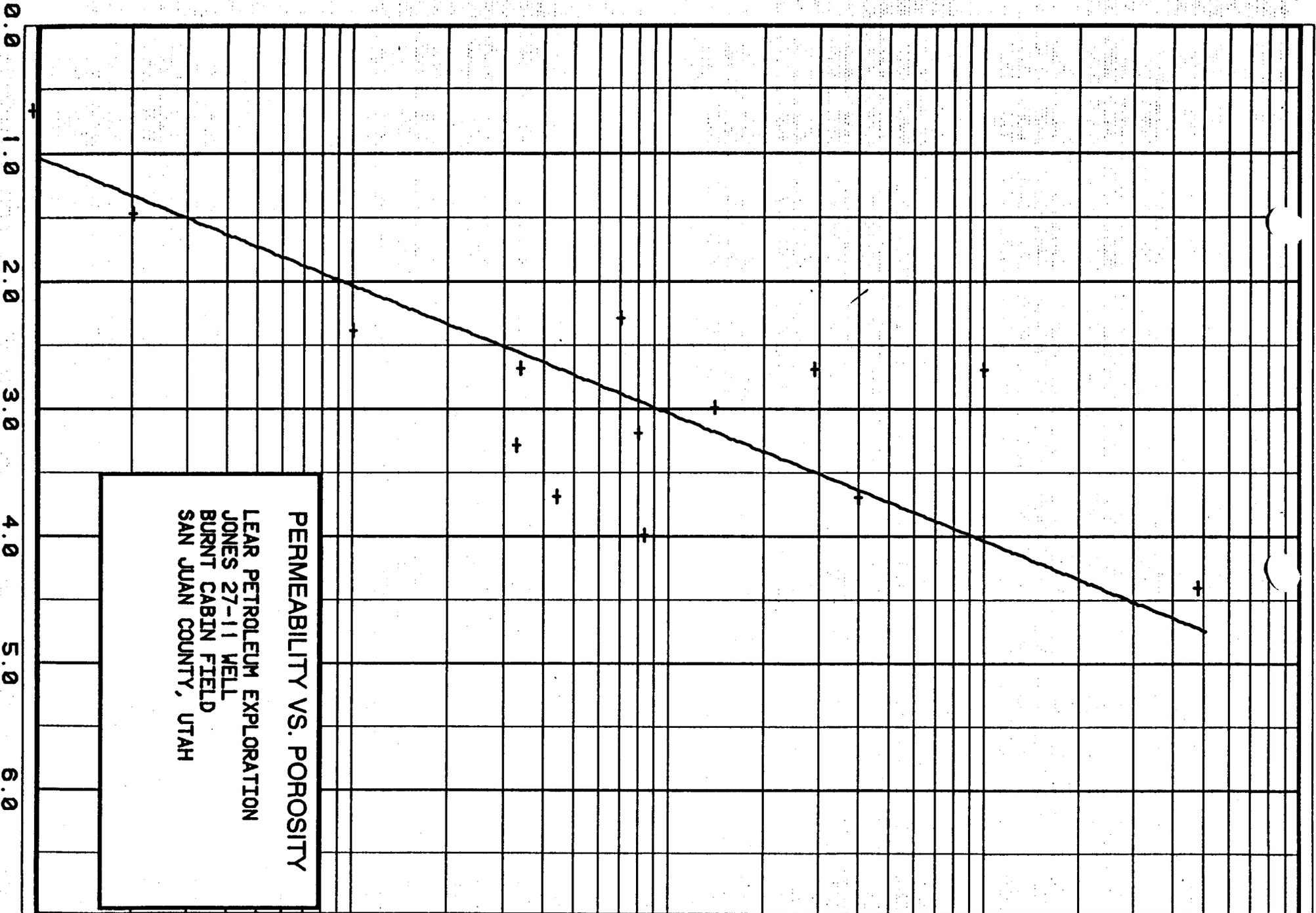
10.

1.

PERMEABILITY: MILLIDARCIES

0.1

0.01



PERMEABILITY VS. POROSITY
LEAR PETROLEUM EXPLORATION
JONES 27-11 WELL
BURNT CABIN FIELD
SAN JUAN COUNTY, UTAH

STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

COMPANY: LEAR PETROLEUM EXPLORATION
FIELD : BURNT CABIN FIELD

WELL : JONES 27-11 WELL
COUNTY, STATE: SAN JUAN COUNTY, UTAH

AIR PERMEABILITY : MD. (HORIZONTAL) RANGE USED 0.000 TO 50.
POROSITY : PERCENT (HELIUM) RANGE USED 0.0 TO 46.0

(PERMEABILITY UNCORRECTED FOR SLIPPAGE)

DEPTH LIMITS : 6428.0 - 6442.0 INTERVAL LENGTH : 14.0
FEET ANALYZED IN ZONE : 14.0 LITHOLOGY EXCLUDED : NONE

DATA SUMMARY

POROSITY AVERAGE	PERMEABILITY AVERAGES		
	ARITHMETIC	HARMONIC	GEOMETRIC
2.9	5.0	0.08	0.66

STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

COMPANY: LEAR PETROLEUM EXPLORATION
 FIELD : BURNT CABIN FIELD

WELL : JONES 27-11 WELL
 COUNTY, STATE: SAN JUAN COUNTY, UTAH

GROUPING BY POROSITY RANGES

POROSITY RANGE	FEET IN RANGE	AVERAGE POROSITY	AVERAGE PERM. (GEOM.)	AVERAGE PERM. (ARITH)	FREQUENCY (PERCENT)	CUMULATIVE FREQUENCY (%)
0.0 - 2.0	2.0	1.1	0.013	0.014	14.3	14.3
2.0 - 4.0	10.0	3.0	0.923	2.1	71.4	85.7
4.0 - 6.0	2.0	4.2	6.3	24.	14.3	100.0

TOTAL NUMBER OF FEET = 14.0

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations, as to the productivity, proper operations, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

COMPANY: LEAR PETROLEUM EXPLORATION
 FIELD : BURNT CABIN FIELD

WELL : JONES 27-11 WELL
 COUNTY, STATE: SAN JUAN COUNTY, UTAH

GROUPING BY PERMEABILITY RANGES

PERMEABILITY RANGE	FEET IN RANGE	AVERAGE PERM. (GEOM.)	AVERAGE PERM. (ARITH)	AVERAGE POROSITY	FREQUENCY (PERCENT)	CUMULATIVE FREQUENCY (%)
-----	-----	-----	-----	-----	-----	-----
0.005 - 0.010	1.0	0.009	0.009	0.7	7.1	7.1
0.020 - 0.039	1.0	0.020	0.020	1.5	7.1	14.3
0.078 - 0.156	1.0	0.100	0.100	2.4	7.1	21.4
0.312 - 0.625	3.0	0.367	0.370	3.2	21.4	42.9
0.625 - 1.250	3.0	0.778	0.780	3.2	21.4	64.3
1.250 - 2.500	1.0	1.4	1.4	3.0	7.1	71.4
2.500 - 5.000	2.0	3.4	3.5	3.2	14.3	85.7
10.- 20.	1.0	10.	10.	2.7	7.1	92.9
40.- 80.	1.0	48.	48.	4.4	7.1	100.0

TOTAL NUMBER OF FEET = 14.0

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STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

COMPANY: LEAR PETROLEUM EXPLORATION
 FIELD : BURNT CABIN FIELD

WELL : JONES 27-11 WELL
 COUNTY, STATE: SAN JUAN COUNTY, UTAH

POROSITY-FEET OF STORAGE CAPACITY LOST FOR SELECTED POROSITY CUT OFF

POROSITY CUT OFF	FEET LOST	CAPACITY LOST (%)	FEET REMAINING	CAPACITY REMAINING (%)	ARITH MEAN	MEDIAN
0.0	0.0	0.0	14.0	100.0	2.9	3.0
2.0	2.0	5.5	12.0	94.5	3.2	
4.0	12.0	79.2	2.0	20.8	4.2	
6.0	14.0	100.0	0.0	0.0		

TOTAL STORAGE CAPACITY IN POROSITY-FEET = 40.3

STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

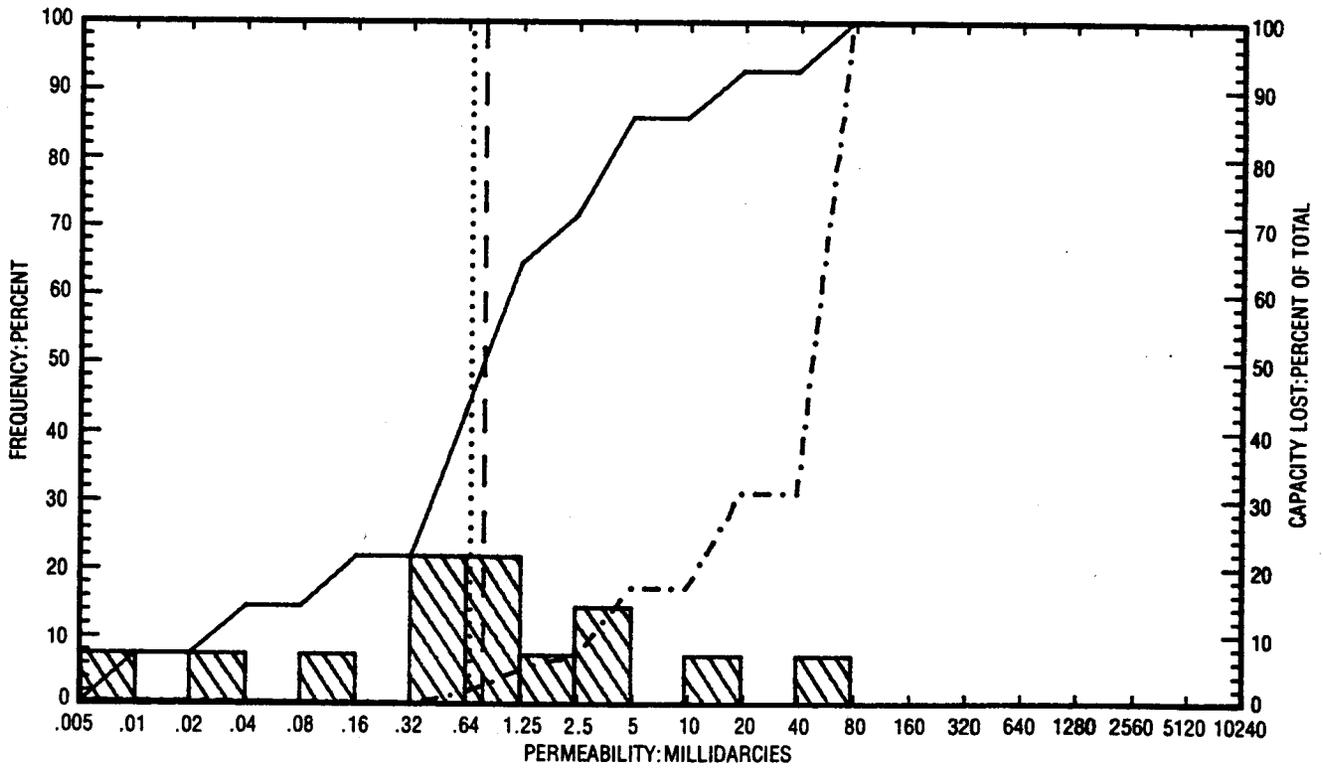
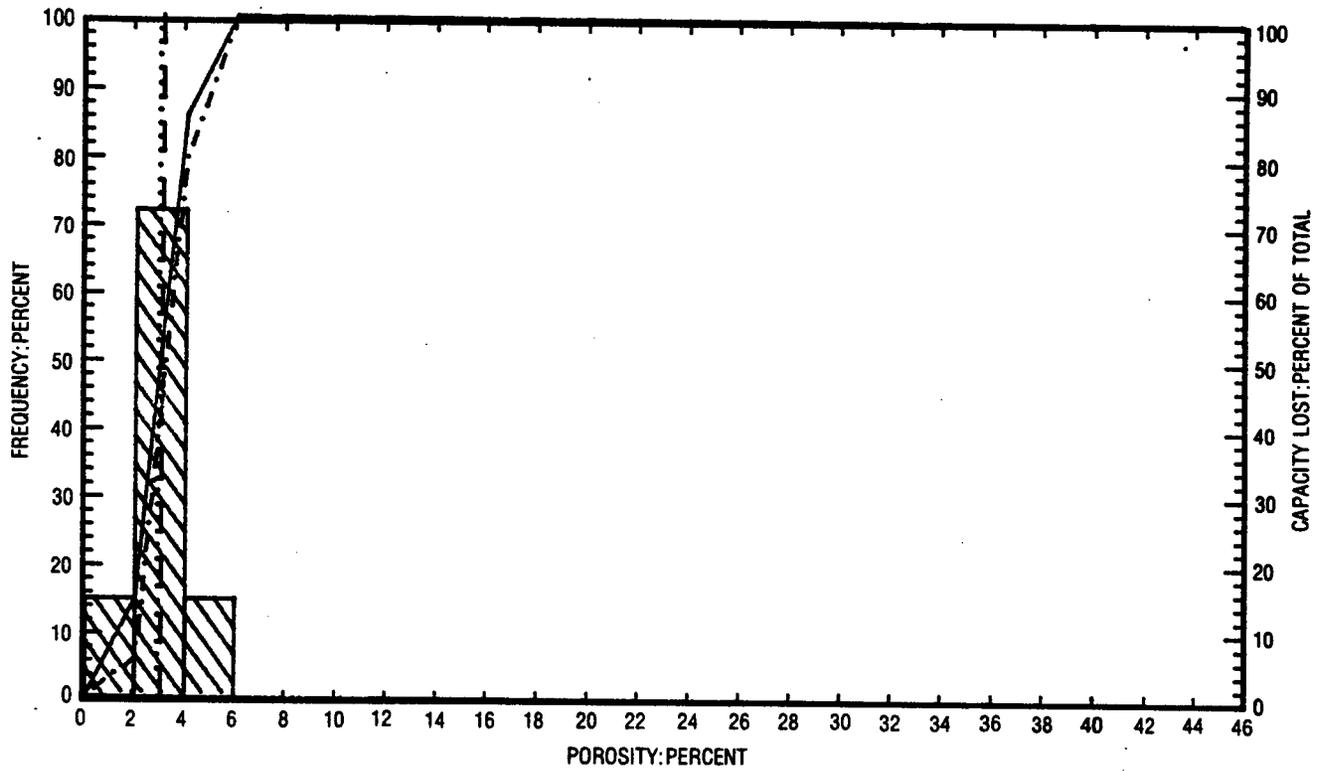
COMPANY: LEAR PETROLEUM EXPLORATION
 FIELD : BURNT CABIN FIELD

WELL : JONES 27-11 WELL
 COUNTY, STATE: SAN JUAN COUNTY, UTAH

MILLIDARCY-FEET OF FLOW CAPACITY LOST FOR SELECTED PERMEABILITY CUT OFF

PERMEABILITY CUT OFF	FEET LOST	CAPACITY LOST (%)	FEET REMAINING	CAPACITY REMAINING (%)	GEOM MEAN	MEDIAN
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0.005	0.0	0.0	14.0	100.0	0.66	0.79
0.010	1.0	0.0	13.0	100.0	0.92	0.88
0.020	1.0	0.0	13.0	100.0	0.92	0.88
0.039	2.0	0.0	12.0	100.0	1.27	0.99
0.078	2.0	0.0	12.0	100.0	1.27	0.99
0.156	3.0	0.2	11.0	99.8	1.60	1.11
0.312	3.0	0.2	11.0	99.8	1.60	1.11
0.625	6.0	1.8	8.0	98.2	2.79	2.50
1.250	9.0	5.1	5.0	94.9	6.00	4.20
2.500	10.0	7.1	4.0	92.9	8.64	5.00
5.	12.0	17.0	2.0	83.0	21.91	20.00
10.	12.0	17.0	2.0	83.0	21.91	20.00
20.	13.0	31.3	1.0	68.7	48.00	
40.	13.0	31.3	1.0	68.7	48.00	
80.	14.0	100.0	0.0	0.0		

TOTAL FLOW CAPACITY IN MILLIDARCY-FEET (ARITHMETIC) = 69.88



PERMEABILITY AND POROSITY HISTOGRAMS

LEAR PETROLEUM EXPLORATION
 JONES 27-11 WELL
 BURNT CABIN FIELD
 SAN JUAN COUNTY, UTAH

- LEGEND**
- ARITHMETIC MEAN POROSITY
 - GEOMETRIC MEAN PERMEABILITY
 - MEDIAN VALUE - - - - -
 - CUMULATIVE FREQUENCY _____
 - CUMULATIVE CAPACITY LOST - . - . - .



CORE LABORATORIES, INC.

Petroleum Reservoir Engineering

COMPANY LEAR PETROLEUM EXPLORATION FILE NO. 3883-3316
 WELL JONES 27-11 DATE 01-JAN-64 ENGRS. GG DS
 FIELD BURNT CABIN FORMATION DESERT CREEK ELEV. 8882 KB
 COUNTY SAN JUAN STATE UTAH DRLG. FLD. WBM CORES _____

CoRes Log

CORE and RESISTIVITY EVALUATION

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RESISTIVITY PARAMETERS: $a = 1.00$ $m = 2.00$ $n = 2.00$. Depths 6428.8 to 6442.8 .
 $a =$ _____ $m =$ _____ $n =$ _____ . Depths _____ to _____ .

PERMEABILITY
MILLIDARCIES

CORE ANALYSIS CALCULATED RESISTIVITY

$R_0 =$ OHM-METERS AT 100% S_w _____

$R_{mp} =$ OHM-METERS AT CRITICAL S_w _____

1000 100 10 1.0 0.1 0.01
DEPTH FEET

← ONE OHM-METER REFERENCE FOR $R_w = 0.01$

